
Standard Specification for

Compost for Erosion/Sediment Control (Compost Blankets)

AASHTO Designation: MP 10-03 (2007)¹



1. SCOPE

- 1.1. This specification covers compost produced from various organic by-products for use as a surface mulch for erosion/sediment control on sloped areas. This technique may be used for both temporary and permanent erosion/sediment control applications.
- 1.2. This technique is appropriate for slopes up to a 2:1 grade (horizontal distance:vertical distance) and should only be used in areas that have sheet flow drainage patterns (not areas that receive concentrated flows). This technique may also be used on up to 1:1 slopes with proper consideration to length of slope and compost application rates (depth).

2. REFERENCED DOCUMENTS

- 2.1. *ASTM Standard:*
- D 2977, Standard Test Method for Particle Size Range of Peat Materials for Horticultural Purposes
- 2.2. *U.S. EPA Test Method:*
- U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition
- 2.3. *TMECC Sampling and Test Method:*
- *The Test Methods for the Examination of Compost and Composting* (TMECC), jointly published by the USDA and USCC (2002 publishing as a part of the USDA National Resource Conservation Technical Bulletin Series)
- 2.4. *Other Standard:*
- U.S. Composting Council Seal of Testing Assurance Program documents, *Development of Landscape Architecture Specifications for Compost Utilization*, The U.S. Composting Council and the Clean Washington Center, 1997

3. GENERAL DESCRIPTION

- 3.1. Compost is the product resulting from the controlled biological decomposition of organic material, occurring under aerobic conditions, that has been sanitized through the generation of heat and stabilized to the point that it is appropriate for its particular application. Active composting is typically characterized by a high-temperature phase that sanitizes the product and allows a high rate of decomposition, followed by a lower-temperature phase that allows the product to stabilize while still decomposing at a slower rate. Compost should possess no objectionable odors or

substances toxic to plants and shall not resemble the raw material from which it was derived. Compost contains plant nutrients but is typically not characterized as a fertilizer.

- 3.2. Compost may be derived from a variety of feedstocks, including agricultural, forestry, food, or industrial residuals; biosolids (treated sewage sludge); leaf and yard trimmings; manure; tree wood; or source-separated or mixed solid waste.
- 3.3. Proper thermophilic composting, meeting the U.S. Environmental Protection Agency's definition for a "process to further reduce pathogens" (PFRP), will effectively reduce populations of human and plant pathogens, as well as destroy noxious weed seeds and propagules.
- 3.4. Compost is typically characterized as a finely screened and stabilized product that is used as a soil amendment. However, most composts also contain a wood-based fraction (e.g., bark, ground brush and tree wood, wood chips, etc.) which is typically removed before use as a soil amendment. This coarser, woody fraction of compost plays an important role when compost is used in erosion and sediment control. It is even possible to add fresh, ground bark or composted, properly sized wood-based material to a compost product, as necessary, to improve its efficacy in this application.
- 3.5. Compost products acceptable for this application must meet the chemical, physical, and biological parameters outlined in Section 4.

4. CHEMICAL, PHYSICAL, AND BIOLOGICAL PARAMETERS

- 4.1. Compost products specified for use in this application are described in Table 1. The products' parameters will vary based on whether vegetation will be established on the treated slope.
- 4.2. Only compost products that meet all applicable state and federal regulations pertaining to its production and distribution may be used in this application. Approved compost products must meet related state and federal chemical contaminant (e.g., heavy metals, pesticides, etc.) and pathogen limit standards pertaining to the feedstocks (source materials) in which they were derived.